## METHOD OF DESIGNING A HEAT SEAL WIDTH BACKGROUND OF THE INVENTION

## ABSTRACT

This invention provides a method of designing a suitable heat seal width which is more resistant to unseal more unsealing than conventional heat-sealing, which comprises involves the steps of;

- (1) heat-sealing a test piece of a sheet to be heat-sealed at a temperature lower than the fusion temperature of a heat seal portion of the sheet,
- (2) heat-sealing another test piece of the sheet at a temperature at or higher than the fusion temperature,
- (3) pulling to peel <u>a heat-sealed</u> portion of each test piece, and measuring <u>the pull</u> strength variation with peel length,
- (4) calculating <u>the peel</u> energy in various peel length <u>as</u> of the test piece heat-sealed at a temperature lower than <u>the fusion temperature of the heat seal portion of the sheet by integrating the pull strength variation,</u>
- (5) calculating also the peel energy of the test piece heat-sealed at the temperature of or higher than the fusion temperature by integrating the pull strength variation up to rupture at a heat-sealed portion, and
- (6) setting the heat seal width at a peel length having a peel energy higher than the peel energy of the test piece heat-sealed at the temperature of at or higher than the fusion temperature.